On the Verb in American Languages. By Wilhelm von Humboldt. Translated from the unpublished original. By D. G. Brinton, M.D.

You recently had the goodness to give an appreciative hearing to my essay on The Origin of Grammatical Forms.

I desire to-day to apply the principles which I then stated in general to a particular grammatical point through a series of languages. I choose those of America as best suited to such a purpose, and select the Verb as the most important part of speech, and the central point of every language. Without entering into an analysis of the different parts of the verb, I shall confine myself to that which constitutes its peculiar verbal character—the union of the subject and predicate of the sentence by means of the notion of Being. This alone forms the essence of the verb; all other relations, as of persons, tenses, modes and classes, are merely secondary properties.

The question to be answered is therefore:—

Through what form of grammatical notation do the languages under consideration indicate that subject and predicate are to be united by means of the notion of Being?

I believe I have shown with sufficient clearness that a language may have a great diversity of apparent forms, and may express all grammatical relations with definiteness, and yet when taken as a whole it may lack true grammatical form. From this arises an essential and real graduated difference between languages. This difference, however, has nothing to do with the question whether particular languages employ exclusively agglutination or inflection, as all began with agglutination; but in the languages of the higher class, it became in its effects on the mind, identical with inflection.

As languages of the higher class, one has but to name the cultivated idioms of Asia and Europe, Sanscrit, Greek and Latin, in order to apply to them the above statement. It is still more necessary, however, to understand thoroughly the structure of those languages which are on a lower plane, partly because this will convince us of the correctness of the classification, partly because these tongues are less generally known.

It is enough to take up some single leading grammatical relation. I select for this purpose the verb as the most important part of speech, with which most of the others come into relation, and which completes the formation of the sentence, the grammatical purpose of all language—and often embraces it wholly in itself. But I shall confine myself solely to that which makes the verb a verb, the characteristic notation of its peculiar verbal nature. In every language this point is the most important and the most difficult, and cannot be made too clear to throw light upon the whole of the language. Linguistic character can be ascertained through this point in the shortest and most certain manner.

The verb is the union of the subject and predicate of the sentence by means of the notion of Being; yet not of every predicate. The attribute which is united to the substance by the verb must be an energic one, a participial. The substance is represented in the verb as in motion, as connecting the Being with the energic attribute. By means of this representation, and the peculiar nature of the attribute, the verb is distinguished from the mere logical copula, with which it is liable to be confounded if these ideas are not understood. If the verb is explained merely as a synthesis of Being with any other attribute, then the origin of the tenses cannot be wholly derived from one idea, for the idea of time alone would allow only a three-fold distinction. Moreover, in such case the true and efficient nature of the verb is misunderstood. In the sentence, "The man is good," the verb is not a synthesis of the adjective "good" with the substantive, but it is a participial of the energic attribute "to be good," which contains a condition, having beginning, middle and end, and consequently resembles an action. Fully analyzed, the sentence would be, "He is being-good." Where the substantive verb stands without a visible predicate, as in the sentence, "I am," then the verb "to be" has itself as the object of a synthesis, "I am being." But as rude nations would find this difficult to comprehend, the verb "to be" is either entirely lacking, as in many American languages, or else it has an original material sense, and is confounded with "to stand," "to give," "to eat," etc., and thus indicates Being as identical with the most familiar occupations.

The subject, the substance represented as in action, may be one independent of the speakers, or it may be identical with one of them, and this identity is expressed by the pronouns. From this arises the persons. The energic attribute may exert its action in various manners in the substance or between two substances; this gives rise to the forms or classes of verbs. Their action must be confined to a given point or period of time. The Being may be understood as definite or indefinite, etc., and in this is the origin of modes. Being is inseparably connected with the notation of time. This, united with the fixation of the point or period of time of an action, forms the tenses. No verb, therefore, can be conceived as without persons and tenses, modes and classes; yet these qualities do not constitute its essence, but arise from the latter, which itself is the synthesis brought about by the notion of Being. The signs of these qualities must be made to appear in the grammatical notation of the verb, but in such a manner that they appear dependent on its nature, making one with it.

The energic attribute, which aids in forming the verb, may be a real movement or action, as going, coming, living, working, etc., or merely a qualitative Being, as a being beautiful, good, mortal, or immortal. In the former case, we have a real attributive verb, in the latter a substantive verb, in which an attribute is considered as at rest, hence as an adjective. Although in both cases the nature of the verb is the

same, yet in many languages this difference leads to a corresponding variety in grammatical notation.

In accordance with these ideas culled from universal grammar, the forms of the conjugations in the various languages will now be considered.

I have taken as a basis for this investigation as many American languages as I thought sufficient for the purpose, and as would not make the survey oppressive by their number; but as I do not name all of them, and pay still less attention to pointing out in what other groups of languages the peculiarities named occur, it must be understood that what is here said is not intended as a characterization of American languages. This is reserved for another study.

In order to judge how closely these languages approach grammatical perfection in this point, we must take as our criterion that condition of speech where there is a class of words, which possess verbal power, and are at the same time separated by a definite form from all other parts of speech. With reference to this condition as the highest, we must arrange in various grades all other structural forms or paraphrases of the verb.

The notion of Being, which constitutes the basis and the essence of the verb, can be indicated either,

1. As expressed independently.

2. As incorporated in the verbal form as an auxiliary verb.

3. As included in the verbal form merely as an idea.

The differences of the languages under comparison can be appreciated most correctly by means of these three headings; but it must not be forgotten that any language may use the first and one of the last two methods, and that in languages which have a substantive verb conjugated with and without auxiliary verbs, all three may be employed.

I.

WHEN THE NOTION OF BEING IS EXPRESSED INDEPENDENTLY.

I must except from this class all instances where the substantive verb is formed from a radical, inasmuch as this root, like any other, must assume the verbal form, and thus come under one of the two other divisions. In such case it expresses the notion of Being, either by an auxiliary, as in the German *Ich bin gewesen*, or simply in the form, as, Iam. When it is remembered that the substantive verbs of all languages are derived from concrete conceptions and impart to these merely the general notion of Being, the above becomes still more obvious.

Now if there is no root-form for the substantive verb, and yet it is expressed independently, and not by another verbal form, this can only be done either by the position of the governing and governed words, or by linguistic elements which are not properly verbs, but only become

so by this use. In the former case the substantive verb is merely understood, in the latter it appears in a definite word, but without a fixed radical.

1. When the notion of Being is understood.

One of the most common forms of sentences in American languages is to bring together an adjective and a substantive, the substantive verb being omitted.

Mexican: in Pedro qualli, the Peter (is) good.

Totonaca: aquit chixco, I (am) a man.

Huasteca: naxe uxum ibaua tzichniel, this woman (is) not thy servant.

In the Mixteca language such expressions have a peculiar arrangement. The adjective must precede the substantive, or rather the predicate must precede the subject, as in the reverse case the words are understood separately, and are not connected into a sentence: quadza $\tilde{n}aha$, the woman is bad; $\tilde{n}aha$ quadza, the bad woman.

In the language of the Mbayas, a sentence can be made with any verb by dropping the verbal affixes, by transposing a letter characterizing the nouns as such, appending an adjective suffix, and uniting this with an independent pronoun. The grammars of this language call this form a passive, but it is just as much a neuter, and is not a verb but a phrase. From *iigaichini*, to teach, we have *n-iigaichin-igi*, taught, and as first person *e n-iigaichin-igi*, I am taught. The initial *n* which accompanies all nouns in this language, is merely the possessive pronoun of the third person, added according to the usage of many of these tongues to leave no noun without a possessive; the termination *igi* is a particle which indicates the place where anything remains. Literally, therefore, *eniigaichinigi* means, I (am) the stopping-place of his teaching, *i. e.*, one who is taught. All affixes of mode and tense, however, may be united to this phrase, so that thus it approaches a verb.

Regarded apart from the changes through tenses and modes, the union of the subject and predicate with the substantive verb omitted, is admirably adapted to express the conjunction of two words in one idea, and as the languages which make use of it also possess the ordinary forms of conjugation, they thus possess a special expression for both the forms of verbs above referred to. We shall note this particularly in the Beto language.

When the subject is not an independent part of speech, but an affixed pronoun, the analogy of this method of notation to a verbal form increases. For this is present even when no characteristic of a tense is added, simply by the union of an attribute and a pronoun. It should be remarked once for all, however, that too much weight must not be attached to whether these elements form one word or not, as this is not an infallible criterion.

The verb cannot be considered to be present as a separate part of speech, when a verb can thus be made out of any word, not merely those stamped as verbs, but also out of those which bear the express characteristics of nouns; and therefore I include all these cases in the class under consideration. For in all these languages there is in fact no verb, but only separate elements of speech with the verb omitted. Such cases are, however, interesting, as showing the gradual approach to the verb, and the effort of the instinct of language to arrive at grammatical form.

The independent personal pronoun rarely makes an element of verbal form, as in speaking it is generally worn down to an affix. When it is used to form a verbal expression, the difference of the elements is apparent. Thus, in the Carib, anaiaca puin au—I (am) not a divider. In that tongue, however, this placement is not applicable to every noun, but only after certain definite verbal forms, especially in negative expressions.

The Lule language confines this notation to participials, and expresses by it the condition of the action and also its time; $mil \ quis \ amaiciton$, you (are) me loving.

The affixed pronouns are either special, confined to these expressions, or if elsewhere in the tongue, are not employed with verbs, or not in this manner; or they are the pronominal affixes of the verb itself.

The Maya or Yucatecan language has a special pronoun which added to any noun forms a sentence with it, and possesses the power to add the idea of the verb; *Pedro en*, I am Pedro. But when it stands alone, without a predicate, it loses this power, as *en* alone does not mean, "I am."

In the Beto language there is, indeed, no special pronoun of this kind, as the one used is also a possessive. Its position, however, makes the difference. When it is prefixed, it is the possessive, but when suffixed it carries with it the power of the verb: humani rru, man I (am); fofei rru, bad I (am). In a similar manner this tongue forms a substantive verb, ajoi rru. The meaning of the root is not given, but it seems to mean something present, at hand. It is suggestive that in these phrases the accent is always on the pronoun, as if to signify that that is the important element.

It is very common in American languages to find the noun and the verb using the same pronouns, with the former to indicate possession, with the latter the subject. This might be explained by supposing that the action is regarded as the possession of, the agent. But it is simpler to suppose that in each case the connection of the person with the noun and the verb is in the thoughts, and this relation is recognized in expression.

In this way the Mbaya language has a sort of descriptive conjugation;

connecting the participles with possessive pronouns; *i-iligodi*, I (am) explaining; but no doubt less definitely, "my explaining," "I to explain."

The language of the Abipones slightly alters the possessive pronouns in some persons and uses them in a similar manner: *ri-aal*, I am lazy; *yo-amkata*, he is good.

When the verbal pronoun is used in such expressions, it is entirely identical with the verb.

This is the case with the Mexican, where the verbal pronoun united to the participle forms a sentence: ni-tlacotlani, I (am) a lover. This expression differs from the present indicative only in the form of the root-word, ni-tlacotla; but it cannot form another tense or mode. The grammarians call such an expression a tense indicating habit. This, however, would not be a tense but a mode, and, in fact, the term rests on a misunderstanding. That such expressions indicate habit is shown by the fact that they do not apply, like the present of the verb, to the temporary action, but convey that it is a custom, or a business; not that I am loving just now, but that I am habitually a lover.

An entirely similar instance occurs in the North Guaranay language, which also permits, besides the regular conjugation, a union of the root of the verb with a pronoun, the verb being omitted. The grammarians of that tongue say that this adds extension and emphasis to the sense of the verb. The real difference, however, is that this procedure treats the verb as a noun, and the extension comes from considering the action expressed by the verb to have become a permanent quality; a poro iuca, I kill men (ordinary conjugation); xe poro iuca, I (am) a man-killer (form with the possessive pronoun); I kill men as my business.

In both these languages, therefore, what have been represented as peculiar and separated forms, tenses indicating habit, or forms of extension, are simply erroneous explanations of quite simple constructions. In Mexican the correctness of this explanation is confirmed by the forms of the vocative, which are identical with this supposed tense, in titlatlacoani, O thou sinner; literally, thou who (art) a sinner.

In the above examples the verbal power lies in the pronouns. But the Mbaya language constructs verbal sentences by adding the sign of the future to any adjective without a pronoun. This sign is de, or before a vowel d: de liidi, it will be pleasant to the taste; d otiya, he will be fat. I do not find other examples, and am uncertain whether other tenses and modes are thus formed. In that case the pronouns would have to be added, and the expression would lose its peculiarity, which is that the tense sign alone carries with it the notion of Being.

The Othomi language makes use in such expressions not only of the pronouns but of all the affixes of the verb, and conjugates a noun together with its article, treating it as a verbal radical: qui-no-munti-

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maha, Thou wert the enriched. Here no-munti is "the enriched," and all the remaining syllables are verbal inflections. Sandoval, who wrote a grammar of the language, explains no as an auxiliary verb; but with the noun he calls it an article, as it is, and he evidently misunderstood the expression. It is wholly a verbal, but as this procedure can be applied to any noun whatever, such an expression is far removed from a real, well-defined verbal form.

The same language has another peculiar form with the possessive, which can only be explained by supplying an omitted verb. Na nultimeans "my property;" but if to this is added the abbreviated pronoun used as a verbal affix, na-nulti-gā, the words mean, "this property belongs to me," or, "my property is it, mine."

In the grammatically obscure consciousness of these people, the ideas of verbal and merely pronominal expression are confounded, as also in the Brazilian language, where "my father" and "I have a father" are expressed by the same word.

The advantages which these languages derive from the formation of sentences with the verb omitted are two.

They can change any noun into a verb, or at least they can treat it as such. It is true that this can also be done by a substantive verb when one is found, but as the languages in question unite the noun to the verbal flexions, their freedom is much greater.

The second advantage is, that when it is desirable to discriminate clearly between the two kinds of verbs, the one which has at base an energic attribute, the other which merely expresses the relation of predicate to subject, a thing to its qualities, this end can be much better reached by the process described than even by the substantive verb, which, by its full verbal form, always recalls the action of an energic attribute.

Many of the languages named include in these expressions particles of time, thereby obscuring the distinction referred to. But in others this is not the case. Thus in the Maya and Beto there are two conjugations, one with the pronoun without time particles, and one with them; and as in both these tongues the present of the true conjugation has a characteristic tense sign, a separate agrist of the present is formed by the other conjugation, which our cultivated tongues cannot express so conveniently.

2. When the notion of Being is expressed by a special word, but without a phonetic radical.

Although the assumption here expressed sounds at first rather enigmatical, yet one can soon see that if the notion of Being is to be conveyed without a phonetic radical, it can only be done through the sign of the person, that is, in the pronoun, with or without a tense sign. This is actually the case in two languages, the Maya and the Yaruri.

We have already seen that in the Maya there is a special pronoun

which unites a predicate to the idea of person into one sentence. There is also another which by itself conveys the idea of the verb, and of which each person has the signification both of the pronoun and the substantive verb, "I" and "I am," "thou" and "thou art," etc. Not only is it so used in the present, but it can take the signs of the tenses. It is distinguished from the pronouns previously referred to in the first and second persons of both numbers only by a prefixed t, as follows:

Pronouns which, with a predicate,		Pronouns which, by themselves, possess verbal power.
Singular.	convey a verbal idea.	possess verbai power.
1.	en	ten
2.	ech	tech
3.	lai lo	lai
Plural.		
1.	on	toon
2,	ex	teex
3.	ob	loob

This similarity leads to the thought that a true phonetic radical may exist in this t, and may induce us to consider this word not as a pronoun but as a substantive verb. But this makes no difference. The fact remains that the word is used both as a simple pronoun and also as a substantive verb. In the translation of the Lord's Prayer, the word toon is a simple pronoun. If t is a radical, it may just as well come from the pronoun. Some languages offer clear examples of this. In the Maipure the expression for the third person singular recurs with all the other persons, as if this sound meant the person, the man generally, and the first and second persons were denoted as the "I-person," "thou-person," etc. In the Achagua language the same radical occurs in all the pronouns, but does not, as in the Maipure, stand alone for the third person singular, but in it, as in the other persons, appears as an affix.

At any rate, this pronoun answers, in the Maya, all the purposes of the substantive verb, and there is no other in the language.

It is quite intelligible that in the conceptions of rude nations the idea of an object, and especially of a person, cannot be separated from the idea of his existence. This may be applied to the forms of expression above mentioned. What seems a violent and ungrammatical omission of the verb, is probably in those people an obscure association of thoughts, a non-separation of the object from its being. Probably it is from the same source that in some American languages every adjective is so considered that it includes not the idea alone, but the expression, "it is thus, and thus constituted."

In the Yaruri language the absence of a phonetic radical meaning "to be" is yet more apparent. Each person of the pronoun is a different word, and they have no single letter in common. The pronoun

which has verbal power is almost identical with the independent personal pronoun. The tense signs are prefixed to it. Thus, que, I am; ri que, I was, &c. This ri, however, is merely a particle which expresses that something is remote, and corresponds with our "from." Ui-ri-di, there was water there, literally "water far is" (from us is). The subjunctive of this substantive verb is given as ri, "if I were." This means, however, "in," and is a particle. The notion of Being is added, as in the pronoun; and the ideas, "in the being," and "if I were," pass into each other.

Strictly speaking, both the verbal notations here expressed are identical with those already mentioned. Here also the verb is supplied by the mind. The difference is that in the latter case the pronouns alone signify being, and contain this notion in themselves, whereas in the other cases this notion arises from the conjunction of subject and predicate. Then also in the Maya language there is a special pronoun for this sole purpose. As far as the forms go, they entirely resemble those of a true verb, and if que and ten are regarded as mere verbs substantive, one who did not examine their elements would take them to be true verbs like the Sanscrit $bh\bar{u}$, the Greek $\varepsilon l_{Bl} l$, and the Latin sum. The example of these languages thus teaches that in the analysis of the substantive verbs of other tongues it is not necessary that a common phonetic radical need be employed.

In the Huasteca language the substantive verb is replaced by affixing a tense sign to the independent pronouns; naua itz, I was, tata itz, thou wert, etc. But the case is not the same. The pronoun receives the verbal power by the suffix itz, and this appears only in later times to have become a sign of the preterit, and in an earlier period to have had a general sense. The mountaineers who seem to have retained the older forms of the tongue use the itz, not only in the preterit, but in the present and future. It was doubtless the expression of some general verbal idea, as, to be, to do, etc.

II.

THE NOTION OF BEING IS INCORPORATED WITH THE VERB AS AN AUXILIARY.

Auxiliary verbs are used only for certain tenses, or form the entire conjugation. The former arises from accidental causes having relation only to these tenses, not to the verb in general. The latter readily arises when a substantive verb offers an easy means of conjugation by uniting with another verb. Sometimes the conjugation by means of an auxiliary shows that the linguistic sense of a notion sought something beyond the person and tense signs to express the verbal power itself, and therefore had recourse to a general verb. This can, indeed, only be constituted of those elements and a radical; but the want in the language is thus supplied, once for all, and does not return with every verb.

An excellent example of this is furnished by the Maya conjugation. In an analysis of it we find an element that neither belongs to the root, nor is a person, tense or mode sign, and when their varieties and changes are compared, there is evident throughout a marked anxiety to express the peculiar verbal power in the form of the verb.

The conjugation in the Maya language is formed by affixing the pronouns and mode and tense signs to the stem. The pronoun is, according to a distinction to be noted hereafter, either the possessive pronoun or that one which, without verbal power in itself, yet receives it when

a predicate is attached to it to form a sentence.

Besides this, the suffix cah accompanies all verbs in the present and imperfect; and the suffix ah accompanies all transitive verbs through the remaining tenses, except the future. Present, 1st person, sing., canan-in-cah, I guard; imperf. 1st pers. sing., canan-in cah cuchi; perf., 1st pers. sing., in canan-t-ah. In is the possessive pronoun, cuchi the sign of the imperfect, t in the perfect is a euphonic letter.

The idea of transitive verbs is here taken somewhat narrower than usual. Only those are included which govern a word outside of themselves. All others are considered intransitive, even those which of themselves are active, but either have no expressed object (as, I love, I hate, etc.), or the word which they govern is in the verb itself, as in the Greek οἰκοδομεο, οίκουρεω. As these can govern a second accusative, the object incorporated in the verb is included in the idea they express.

The tenses of the intransitive verbs, except the present and imperfect, while they drop ah and the possessive pronoun, are formed with that

pronoun which forms sentences with a predicate.

There are cases where not only the present omits cah, but where the stem, if it ends in ah as is often the case, drops it, and substitutes ic. The signification then alters, and indicates an habitual action or quality. As ic is the sign of the gerund, this change appears to be the transformation of the verb into a verbal, and to effect this, it must be united to that pronoun which serves as the substantive verb; ten yacunic, I love, properly, I am loving (habitually).

What cah and ah mean by themselves, we are not informed. Where cah is attached to the stem of some verbs it signifies intensity. Ah is as a prefix the sign of the male sex, of the inhabitant of a place, and of names derived from active verbs. Hence it seems to have meant at first person, man, and later to have become a pronoun, and finally an affix. It is noteworthy that the same difference exists between ah and cah, as between en and ten. The c may therefore be a radical sound. In the conjugation, cah is treated wholly as a verb. For in this the possessive pronoun is always prefixed; and as in the present and imperfect it is placed after the stem of the verb and before cah, it is evident from the difference between the two forms canan-in-cah and in-canan-t-ah, that in the former cah, and in the latter canan, are regarded as the verbs. Canan-in-cah is precisely as the English "I do guard."

Cah is consequently a true auxiliary verb; ten, when it appears in conjunction with en must have the notion of Being understood: ah appears to be of similar nature, but as it appears only in the conjugation of transitive verbs, it is a verbal sign, and thus receives its verbal power. That cah and ah do really possess this powever is evident from the fact that they are never used whenever either of the pronouns which are always associated with the notion of Being is present.

Except in the future of transitive verbs, there is no instance in the conjugation where the stem of the verb is not accompanied by one of these four syllables, all of which indicate Being, and all of which have

the force of auxiliary verbs.

The future of transitive verbs not only does not take any of these syllables, but even rejects ah when it is the terminal syllable of the stem. In this case no other termination replaces it. On the contrary, all other verbs receive a new suffix in their future, varying as they are of one or many syllables. The nature of these suffixes has not been explained.

The definite results of this analysis are as follows:

1. The Maya language possesses in its conjugation, besides the inflection syllables of the persons and tenses, another element, which, except in the simple future of transitive verbs, distinctly carries with it the notion of Being; in the future of most verbs there is such an element, but of unknown origin, and it only fails in the future of one class of verbs.

2. This language displays an effort to express, besides the other purposes of the verb, particularly its synthetic power, which is all the more apparent as it uses different means in different cases, but all designed to accomplish the same purpose.

The Yaruri language constructs the whole of its conjugation in a

yet simpler manner by means of an auxiliary verb.

The union of the pronoun and the tense sign which, as we have already seen, forms the substantive verb, affixed to the stem, completes the inflections of the one and only conjugation of attributive verbs, except that the independent pronouns are prefixed. Neither the stem nor the auxiliary words suffer any changes, except the insertion of an n in one person. The union remains, however, a loose one, and when person and tense are manifest by the connection, the auxiliary verb is omitted. This happens in certain verbs ending in pa. These, contrary to the usual rule, change in the perfect this termination to pea, by which the tense is made apparent, and as the person is evident from the prefixed personal pronoun, the auxiliary can be dropped without danger of obscurity.

The formation of certain tenses by means of auxiliaries is also frequent in American languages.

An optative of this nature in the Lule language has already been mentioned.

In the Mixteca tongue the imperfect is thus formed from the present, which carries with it the personal sign, and the perfect without its personal sign, a proceeding which, however rude and awkward it may be, shows a just appreciation of the peculiarity of this past tense, which expresses an action as going on, and therefore present in past time. The expression of continuous action is placed first, "I sin," then this is more precisely defined by the mark of past time, "this was so;" Yo-dzatevain-di-ni-cuvui. Yo is the sign of the present, ni of the preterit, di is the pronoun; the other two words, to sin and to be: "I was sinning."

The sign of the present, yo, is probably an abbreviation of the verb yodzo, I stand upon or over something, and so there is a second auxiliary in the sentence. This may often be a means of discovering the origin of tense signs, as, especially in American tongues, tenses are often formed by the union of verbs, as also occurs in Sanscrit and Greek.

The Othomi distinguishes certain past tenses, which, however, are separated by other characteristics, by a prefixed xa, which is called the third person singular of a substantive verb. As these tenses are precisely those in which the action must be completed, the perfect, pluperfect and future perfect, not, however, the imperfect and past acrist, such a connection is very suitable. Of this verb we have only xa, and there is another substantive verb gui, which itself takes oca in its conjugation.

The Totonaca language unites the perfect, in the person spoken of, with the third person singular of the future of the substantive verb, to form a future perfect. This is no completed form, but only an awkward sequence of two verbs; yc-paxquilh-na-huan, literally, "I have loved, it will be," = "I shall have loved."

In similar manner the substantive verb is used to form a tense of the subjunctive.

The sign of both the perfects in this tongue is the syllable nit, and niy means "to die." It is not improbable that this affix is derived from this verb. Death and destruction are suitable ideas to express the past, and some languages employ negative particles as signs of the preterit. In the Tamanaca this is not exactly the case, but the negative particle puni added to a word which signifies an animate thing, intimates that it has died; $papa\ puni$, the deceased father, literally, "father not." In the Omagua tongue the same word signifies old, dead, and not present.

In the Maipure and Carib tongues the negative particles ma and spa are also the signs of the preterit. Bopp's suggestion that the Sanserit augment was originally a privative finds support in this analogy. Yet I would not speak conclusively on this point, as probably that, the Greek augment ε , and the Mexican o, are only lengthened sounds, intended to represent concretely the length of the past time. At any rate one must regard the negation as an actual destruction, a "been, and no longer being," not as simply a negation of the present.

III.

THE NOTION OF BEING IS PRESENT IN THE VERBAL FORM ONLY IN IDEA.

In this case the verb consists only of the stem, and the person, tense, and mode signs. The former are originally pronouns, the latter particles. Before they are worn down by use to mere affixes, the three following cases may arise:

1. That all three of these elements are equally separable and loosely connected.

2. That one of the two, the person or the tense and mode signs, obtains a closer connection with the stem, and becomes formal, while the other remains loosely attached.

3. That both these are incorporated with the stem, and the whole approaches a true grammatical form, although it does not fully represent it.

Case 1st.

The only language I can instance here is that of the Omaguas, as I know no other with such a decided absence of all true grammatical forms in the verb. The independent pronouns, the stem words of the verbs, and the particles of tense and mode are merely placed together without any change, without internal connection, and apparently without fixed order; usu, to go; 1st pers. sing. pres. ta usu; 2d pers. sing. perf. avi ene usu (ene is the pronoun, avi the sign of the perfect). Subjunctive, 1st pers. sing. pres. ta usu mia; 2d pers. sing. perf. avi epe usu mia.

Sometimes, when a misunderstanding is not feared, the verbal stem is employed without these qualifying particles, and cannot then be distinguished from a noun. *Paolo amai amano*. The last word means "to die," but grammatically the sentence can as well be rendered, "Paul only die" (i. e. has died), as "Paul only dead."

It is true that the suffix ta changes nouns to verbs: zhiru, clothes, zhiru-ta, to clothe; but it also changes verbs to nouns, yasai, to cover, yasai-ta, a cover. This may be explained by the theory that this suffix conveys the idea to make, which is taken sometimes actively, sometimes passively.

According to the above, the Omagua conjugation falls in the class where an attributive is united to a pronoun and the verb is omitted; only that here definite tense syllables appear, and this brings the construction nearer to the idea of a conjugation.

Case 2d.

1. The Maipure, Abipone, Mbaya and Mocobi languages place only the personal sign in intimate connection with the verb, and allow the tense and mode signs to be loosely attached. They have therefore but one type of personal forms to be applied in every tense and mode by means of the particles or the affixes formed from them. This type, taken alone, usually forms the present; but, accurately speaking, this name cannot be assigned it; because the signs of the other tenses are also dropped when this can be done without obscurity. Ya-chaguanime-yaladi. Here the first word is in the indefinite form, though it is not the present but the perfect. The me is really the preposition "in;" but usage has adopted it for the subjunctive sign, and so the Spanish grammarians call it; or rather, the verb is considered to be introduced by a conjunction, "if," "as," so that it is usually not in the present but a past tense. If this is the case with the last verb, the first one must have the same tense, and so the whole phrase, without any tense sign, means, "I had helped him when I said it."

One would scarcely expect to find anything like this in cultivated languages. Yet it does occur in both Sanscrit and Greek. The now meaningless particle sma in Sanscrit when it follows the present changes it into a past, and in Greek \ddot{a}_{ν} alters the indicative into a subjunctive.

To form this general type, the Maipure makes use of the unchanged possessive pronoun, and treats nouns and verbs in the same manner. The noun must always be united to a possessive pronoun, a trait common to all the Orinoco tongues and many other American languages. In the 3d person sing., however, neither the verb nor the noun has such a pronoun, but it is to be understood; nuani, my son; ani, alone, not son, but "his son." The 3d pers. sing. of the verb is often the mere stem, without a personal sign, but that this peculiarity should also extend to the noun I have met only in this tongue. It is evident that a pronoun is considered as essential to a noun as to a verb, and although a similar usage is found in many tongues, yet it appears in none so binding. There are, indeed, some nouns which are free from the necessity of thinking them in connection with a person, but these have the suffix ti, which is dropped when the possessive pronoun is added; java ti, a hatchet, nu java, my hatchet. From this it is evident that ti does not belong to the stem, and is incompatible with the use of a possessive, hence it is the sign of the substantive, in its independent condition. The same occurs in Mexican, and the chief termination of substantives, tli, is almost identical in sound with that in the Maipure.

In this respect the verbal, conjugated with the personal signs, differs nothing from the noun united to its possessive pronouns. Grammatically, the form first becomes a verbal one by the added particles of tense and mode. The signification of these can generally be clearly ascertained, and thus are united closely to the stem.

The particles which the language of the Abipones uses to form the general verbal type are quite different from the possessives. The tense and mode particles have elsewhere in the tongue independent meanings. Thus kan, the sign of the perfect, means a thing which has been, time that has past.

In the language of the Mocobis the personal signs consist merely in letters, prefixed and suffixed, and have no apparent relationship to the pronouns. By affixing these letters, phonetic changes take place so that the stem is combined with them into one form.

Among the tense signs, a prefixed l indicates a past time, a suffixed o, the future; but the others are independent particles, loosely attached to the stem.

I have already shown how the Mbaya language conjugates adjectives with the independent pronoun, and participles with the possessive pronoun. The signs used in the conjugation proper of the attributive verb, do not appear elsewhere in the tongue, and must have descended from an older period of its existence.

In the tense and mode signs it is easily perceived how descriptive phrases pass into true forms. For the imperfect and pluperfect the speaker can choose among a number of particles, all of which indicate past time. The modes have definite signs, but these are merely appended, and some have separate significations. The future and perfect have not merely fixed particles, but these are worn down to one letter, so that the stem is actually incorporated with them.

2. In the languages heretofore considered the personal signs added to the word make up the conjugation, and the other signs are attached loosely and externally. The reverse of this, though not perfectly so, appears in the Lule language. The tense and mode signs, often of but one letter, are immediately and firmly attached to the stem, and the pronouns are affixed to this to complete the conjugation. These pronouns are, however, the ordinary possessives, so that noun and verb become in a measure identical; thus, camc means both "I eat" and "my food;" cumuee, "I marry" and "my wife;" only in a few examples are the verbal pronouns distinct from the possessives.

In this case, therefore, the personal signs are independent elements, occurring elsewhere in the language, while the tense and mode signs are true affixes.

The inflection-syllables form with the stem real verbal forms, and so far the conjugation of this language belongs to the third case. But each of the elements has its fixed position, and as soon as one has the key to the combination, he can recognize and separate them at once.

Reasons which it would require too much space to set forth render it probable that all the tense signs are really auxiliary verbs or come from them. This is evident of the optative, as has already been shown. The present only is simple, as it has no tense sign.

Slight differences are found between the personal signs of some tenses, so that these tenses can be distinguished by them, a trait usually seen only in tongues so far cultivated that the grammatical forms have undergone such changes as no longer to present simple and uniform combinations. Equally curious is the regular omission of the tense sign of past time in the third person plural only. Although, except in

this case and that of the present, each tense has its definite sign, inserted between the stem and the personal sign, yet there are, besides these, various particles expressing past time, which can accompany the usual tense form, so that there is a double sign of time, one in the word itself and one loosely attached to it.

The languages of the Mbayas, Abipones, Mocobis and Lules are closely allied both in words and in some grammatical forms. It is all the more extraordinary, therefore, to find the last-mentioned pursuing a method in the structure of its verb which is almost totally opposed to that in the other three tongues.

Case 3d.

The languages of this class approach in their conjugations those of the more cultivated tongues, in which each verbal inflection has a fixed and independent form. Both the person, the tense and the mode signs are united to the stem, in such a manner that none of the three can be said to be either less or more loosely attached than the others.

All the conjugations about to be discussed lack, however, that fixity of form which grammatically satisfies the mind.

The elements are placed definitely and regularly one by the other, but are not incorporated into each other, and are therefore readily recognizable.

They are found, moreover, outside of the verb elsewhere in the language either without any change or with slight differences of sound; the personal signs as pronouns, the other affixes as particles.

The composition of the verb is separable, and may receive into itself other parts of speech.

No American language is free from these drawbacks to perfection of form in the conjugations. In some all three are found; in most the first and last. In really grammatically developed tongues, as in the Sanscrit, Greek, Latin and German, none of these imperfections exists. The verb includes in itself no part of its object, the affixes modifying the stem have lost all independent life, and the analysis of the formal elements becomes a difficult philological task, which often fails and only rarely can be fully proved.

I shall discriminate in regard to the conjugations about to be considered that which is an approach toward a fixed form from the intentional separation of the form to insert a governed word.

1. Approach toward a Fixed Form.

In the Mixteca language, the personal sign is the unchanged possessive pronoun. If the verb is governed by a noun in the third person, the possessive is dropped. It is left to the speaker to choose whether he designates the person, either by prefixing the personal pronoun or suffixing the possessive. The tense signs are prefixed syllables, but the

perfect and future signs are altogether different from those of the present, and materially alter the verbal stem.

The Beto language prefixes the personal signs and also the possessive pronouns to the nouns. As the latter are not fully known, we cannot judge of their identity with the verbal pronouns. The latter do not seem to differ much from the personal pronouns. The tense signs are easily recognized suffixes.

Another conjugation of the same language, by the suffixed pronoun without tense signs, and with the verb omitted, has been mentioned above (I, 1), as forming a substantive verb.

A second substantive verb arises from the conjugation above explained, with the tense signs.

These two forms may also be combined, and this illustrates with what superfluous fullness grammatical forms spring up even among rude nations. The conjugation with the tense sign is changed by a participial suffix into a verbal, and then the pronoun is suffixed, as in the conjugation without the tense sign. The latter, therefore, stands twice in the form. The pronoun used in the conjugation with tense signs may also be prefixed to a simple adjective, and the pronoun used in the conjugation without tense sign is suffixed to this, and the participial ending is then added. This is treated as a verb with the substantive verb understood. But sometimes the verb "to be" in the form without tense signs is added, and then the whole form contains the pronoun three times, without gaining thereby any additional meaning.

The Carib conjugation seems to have arisen from the forms of many dialects or epochs, and is therefore more complicated and formal, and less easy to analyze.

The personal signs are prefixed. In the substantive verb there are two classes, of which only one is also common to attributive verbs. The other indicates in the verb "to be" also the connection of persons with the infinitive and gerund, and is therefore of the nature of a possessive. It may also be that when it is combined with other tenses, the notion among these nations is altogether a substantial one, as we have already seen with the subjunctive.

The stem often receives the addition r or ri, the meaning of which is not known.

The structure of the Tamanaca conjugation also reveals a combination of at least two separate structures. Some tenses use as their personal signs entire pronouns, almost identical with the personals. Other tenses merely change the initial letter of the verb, while there is little similarity between these affixes and the pronouns. In the plural some of the persons insert a syllable between the verb and the tense sign.

The tense signs are suffixed, and consist merely of terminal letters or syllables, except two true particles, which distinguish the continued present from the present agrist.

There are an initial y and a t occasionally appearing in all persons, of which we can only say that they are not radicals.

The conjugation of this language, therefore, consists of elements not readily analyzed.

The Huasteea language prefixes the possessive pronouns as personal signs. It may also drop them, and use in their stead the independent pronouns; or may combine both; or may use abbreviated personals; so that there is a prevailing arbitrariness in this part of the verbal form.

The tense signs are usually suffixes; but in the future they are prefixes, which are incorporated with the personal sign placed between them and the stem. They consist of simple sounds, of no independent signification. But the particles of the imperative are so separable that when this mode is preceded by an adverb, they attach themselves to it.

The Othomi language does not make use of the possessive pronouns in the conjugation, but suffixes abbreviated forms of the personals, or else prefixes others of special form, but identical in many letters and syllables with the personals. In the present condition of the language the suffixes are used only with the substantive verb; in the attributive verb, however, they may have been driven forward by the governed pronouns suffixed. Every verbal inflection may also take, besides its pronominal prefix, also the unabreviated personal pronoun in front, or the abbreviated one after it.

The tense signs consist principally of single vowels, by means of which the pronominal prefixes are attached to the stem. The imperfect and pluperfect alone have besides this a loosely attached particle. The past tenses possess a prefix, which we have already seen appears to have been derived from an auxiliary verb.

In the third person of some tenses in certain verbs the stem undergoes a change of its initial letters, which appears to transform these inflections into verbal adjectives, an instance of the confusion of the ideas of noun and verb common in all these languages.

The Mexican language possesses a peculiar class of verbal pronouns which form the personal signs. This pronoun is similar to the personal in its consonants, but has a vowel of its own. It is a prefix. The plural is marked by the accent, or by a special termination. This personal sign is inseparable from the verb, but the speaker may also prefix the independent personal pronoun.

The tense signs are all without signification, being single letters or syllables. The perfect is marked not so much by an affix, as by changing, the termination of the verb in various ways, but chiefly by shortening and strengthening the sound. All tense designations are placed at the end of the word, except the augment for past time. If by augment we mean a vowel sound prefixed to the verb in certain tenses in addition to their usual signs, then the Mexican is the only American language which possesses one.

The modes are designated by loosely attached particles, also by a different structure of the tenses, and in the second person a peculiar pronoun.

Thus the Mexican conjugation consists of true verbal forms, not of separate parts of speech of independent significance; but the elements of these forms are easily recognizable, and can be reached without difficulty.

The most difficult to analyze, and hence the most nearly approaching our conjugations, is that of the Totonaca language.

The personal signs differ from the pronouns. That of the 2d pers. sing. is not easily recognized, and several forms of it must be assumed. Its position as a prefix or suffix differs, and it is variously located with reference to the other verbal signs. Still more difficult is it to distinguish the tense signs. There are three different systems of prefixes and suffixes in the conjugation, and the plan on which these are combined with each other serves to distinguish the tense. But only a few of these affixes really appear to designate tense; of the others this may be suspected at best, and of others again it is improbable.

Thus there are verbal affixes which cannot be considered to designate either persons, modes or tenses.

The stem undergoes little change, but the attaching of the affixes to it renders it impossible to apply the same scheme to all verbs, and hence leads to a division of them into three conjugations.

Some tenses have two different forms, without any change in signification.

2. Divisibility of Verbal Forms to allow the insertion of governed parts of speech.

Of the Mixteca tongue it cannot exactly be said that it divides the essential parts of the verbal form to allow the insertion of the governed object. As a rule, the object is merely appended, and where it appears in the form itself, it is inserted between the stem and the suffixed pronoun. The latter is, however, no necessary part of the form, as it is dropped when the verb is governed by a noun, and can always be replaced by prefixing the indefinite pronoun.

Nor is it mentioned that the Beto language includes the object in the yerb.

The Carib tongue unites the governed pronoun with the verbal form, and in some cases the personal sign is thus displaced. But here the object is not inserted in the middle, but is prefixed or suffixed.

Our information about the Tamanaca language discloses nothing on this point.

In the Huasteca, the governed pronoun separates sometimes the last, sometimes the first syllable of the inflectional form from the stem.

The Othomi merely attaches the governed words closely to the verbal form, in this resembling the Mixteca.

The Mexican language is that which has developed this peculiarity to the greatest degree. The governed noun is placed in the middle of the verb; or, if this is not done, a pronoun representing it is inserted.

If there are two objects, an accusative and a dative, then two corresponding pronouns are inserted; and if no object is named, but the verb is of that class which is followed by an immediate or remote object, or both, then two indefinite pronouns appear in the verb. The Mexican verb therefore, expresses either a complete sentence, or else a complete scheme of one, which merely requires to be filled out. It says, in one word, "I give something to somebody," nititlamaca, and then defines what it is and to whom.

It follows necessarily that a part of the verbal form is fluctuating according to the sense and connection of the sentence, and that the governing pronoun stands sometimes immediately before the verb, and sometimes is separated from it by indefinite pronouns or even nouns.

In the Totonaca language, the prefixes and suffixes make room for the governed words between themselves and the stem.

This examination of the languages whose conjugations approach a fixed form, shows clearly that this fixedness is seriously shaken precisely where it is most important, through this insertion of the governed words.

Now if we reflect on the structure of the various verbal forms here analyzed, certain general conclusions are reached, which are calculated to throw light upon the whole organism of these languages.

The leading and governing part of speech in them is the Pronoun; every subject of discourse is connected with the idea of Personality.

Noun and Verb are not separated; they first become so through the pronouns attached to them.

The employment of the Pronoun is two-fold, one applying to the Noun, the second to the Verb. Both, however, convey the idea of belonging to a person; in the noun appearing as Possession, in the verb as Energy. But it is on this point, on whether these ideas are confused and obscure, or whether they are defined and clear, that the grammatical perfection of a language depends. The just discrimination of the kinds of pronouns is therefore conclusive, and in this respect we must yield the decided pre-eminence to the Mexican.

It follows that the speaker must constantly make up his verbs, instead of using those already on hand; and also that the structure of the verb must be identical throughout the language, that there must be only one conjugation, and that the verbs, except a few irregular ones, can possess no peculiarities.

This is different in the Greek, Latin and ancient Indian. In those tongues many verbs must be studied separately, as they have numerous exceptions, phonetic changes, deficiencies, etc., and in other respects carry with them a marked individuality.

The difference between these cultivated and those rude languages is chiefly merely one of time, and of the more or less fortunate mixture of dialects; though it certainly also depends in a measure on the original mental powers of the nations.

Those whose languages we have here analyzed are, in speaking, constantly putting together elementary parts; they connect nothing firmly, because they follow the changing requirements of the moment, joining together only what these requirements demand, and often leave connected through habit, that which clear thinking would necessarily divide.

Hence no just division of words can arise, such as is demanded by accurate and appropriate thought, which requires that each word must have a fixed and certain content and a defined grammatical form, and as is also demanded by the highest phonetic laws.

Nations richly endowed in mind and sense will have an instinct for such correct divisions; the incessant moving to and fro of elementary parts of speech will be distasteful to them; they will seek true individuality in the words they use; therefore they will connect them firmly, they will not accumulate too much in one, and they will only leave that connected which is so in thought, and not merely in usage or habit.

Notes (by the translator) on the various American Tribes and Languages mentioned by Humboldt in the preceding Memoir.

Abipones.—A tribe formerly residing on the broad grassy plains known as El Gran Chaoo, west of the Parana river and on the right bank of the Rio Vermejo. They are a nomadic, hunting people, and are related by language closely to the Mocobis and Tobas, more remotely to the Mbayas. The Jesuit, Father Jose Brigniel, wrote an Arte y Vocabulario de la Lengua Abipona, which has not been published.

Achaguas.—A small tribe formerly living in Venezuela, between the Apure and Meta rivers. They are mentioned by Piedrahita as an intelligent people. Aristides Rojas says they are now extinet (Estudios Indigenas, p. 214. Caracas, 1878).

Beto.—Usually spelled Betoi or Betoya. They live on the upper waters of the Meta river in Colombia and are related to the Yaruris.

Caribs.—This widely extended stock occupied much of the northern coast of South America and had planted colonies on many of the Antilles. It is believed that they are distantly connected with the Tupis and Guaranis.

Guaranis.—The name of a number of affiliated tribes in Southern Brazil, Paraguay, Uruguay and the Argentine Republic. The Tupis of Brazil are a branch of the Guaranis.

Huastecas.—A northern colony of the great Maya stock of Yucatan, dwelling in the province of Tampico on the river Panuco. At the time of the discovery they were an important and cultured nation.

Lule.—One of the nations of El Gran Chaco, west of the Parana river. The Arte y Vocabulario de la Lengua Lule y Tonocote, by Father Antonio Machoni de Cerdeña (Madrid, 1732), was republished with a careful ethnographic introduction by J. M. Larsen, at Buenos Ayres, 1877.

Maipures.—Tribes of various dialects who live on both sides of the Orinoco river where it forms the boundary between Venezuela and New Granada, about 5° N. lat.

Mayas.—Natives of Yucatan, and the most highly developed of any of the American nations. Related dialects are spoken in Guatemala, in Tabasco, and by the Huastecas.

Mbayas.—A people of the Gran Chaco in the northern part of the Argentine Republic, and distantly related to the Abipones.

Mexican.—Otherwise called the Nahuatl or Aztec language. Spoken in the greatest purity in the valley of Mexico, it extended from the Gulf of Mexico to the Pacific, and along the latter from Sonora to Guatemala, with few interruptions.

Mixtecas.—A tribe speaking several dialects living in the State of Oaxaca, Mexico.

Mocobis.—One of the four principal nations who formerly occupied El Gran Chaco, west of the Parana river. By some the name is spelled Mbocoby.

Omiguas.—Once a nation of considerable extent and culture between the Marañon and the Orinoco.

Othomis.—A tribe resident near San Louis Potosi, Mexico, and neighboring parts. Their proper name is said to be $Hi\bar{a}$ - $hi\bar{u}$. Their language is monosyllabic and nasal.

Tumanacas.—These dwell on the right bank of the Upper Orinoco, and are connected by dialect with the Carib stock on the one hand and the Guaranay on the other.

Totonacas,—A nation asserted by Pimentel to speak a mixed PROC. AMER PHILOS. SOC. XXII. 120, 2s. PRINTED MAY 29, 1885.

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language (Nahuatl and Maya) dwelling in the southern portion of the Province of Vera Cruz, Mexico, and parts adjacent.

Tupis.—The natives of the eastern area of Brazil, related to the Guaranis of the south and perhaps to the Caribs of the north. The Lingoa Geral of Brazil is a corrupt Tupi.

Yaruris.—Residents on the upper streams of the Meta river in New Granada, related to the Betoi.

Stated Meeting, March 20, 1885.

Present, 12 members.

Curator, Dr. HORN, in the Chair.

Mr. W. W. Jefferis, a new member, was presented to the Chair, and took his seat.

Donations for the Library were received from the Kaiserliche Akademie der Wissenschaften; Prof. F. Reuleaux, of Vienna: the Zoölogische Anzeiger; the Statistika Central Byrån; the Nordesk Oldkyndighed og Historie Selskab; Mr. Alph. Dubois of Bruxelles; the Real Academia de la Historia at Madrid: the Instituto y Observatorio de Marina de San-Fernando; the R. Accademia dei Lincei, at Rome; the Société de Geographie, at Paris; the Revue Politique; the Meteorological Council; the Cambridge Philological Society; the Journal of Forestry: London Nature; the Massachusetts Historical Society; the American Philological Association, at Cambridge; the Essex Institute; the American Antiquarian Society, at Worcester; the Connecticut Academy of Arts and Sciences; the American Chemical Journal; the Cornell University; the New Jersey Historical Society; the Franklin Institute; the College of Pharmacy; the Pennsylvania Historical Society; the Commission for the Erection of the Public Buildings of Philadelphia; Mr. Henry Phillips, Jr.; Mr. Burnet Landreth; the Johns Hopkins University; the United States Fish Commission; the United States Geological Survey; the Smithsonian Institu-